

Cytokine gene polymorphisms in lymphoma

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Background: Several cytokines are known to be involved in the pathogenesis of non-Hodgkin Lymphomas (NHL). **Aim:** Given the importance of understanding the genetic predisposition involved in the pathogenesis of NHL, this work was designed to study the impact of IL-10 (-1082 G/A; rs1800896 and -819 C/T; rs1800871), IL-6 (-174 G/C; rs1800795) and CD38 (184C/G; rs6449182) gene polymorphisms on the susceptibility of Egyptians to NHL. **Materials and Methods:** Both loci of IL10 were genotyped using polymerase chain reaction- sequence-specific primers (PCR-SSP), IL6 rs1800795 G/C was genotyped using mutagenically separated PCR (MS-PCR) and restriction fragment length polymorphism-PCR (RFLP-PCR) was used to genotype CD38 (rs6449182 C/G) in 100 Egyptian patients and 119 controls. Plasma levels of IL-6 and IL-10 were measured using enzyme-linked immunosorbent assay (ELISA). **Results:** An insignificant change in IL-10 (rs1800896 and rs1800871) genotypes were recorded. GT haplotype was significantly elevated. **Conclusion:** Lymphoma samples express a particular polymorphism.

Keywords: CD38; IL-10; IL-6; NHL; SNP

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